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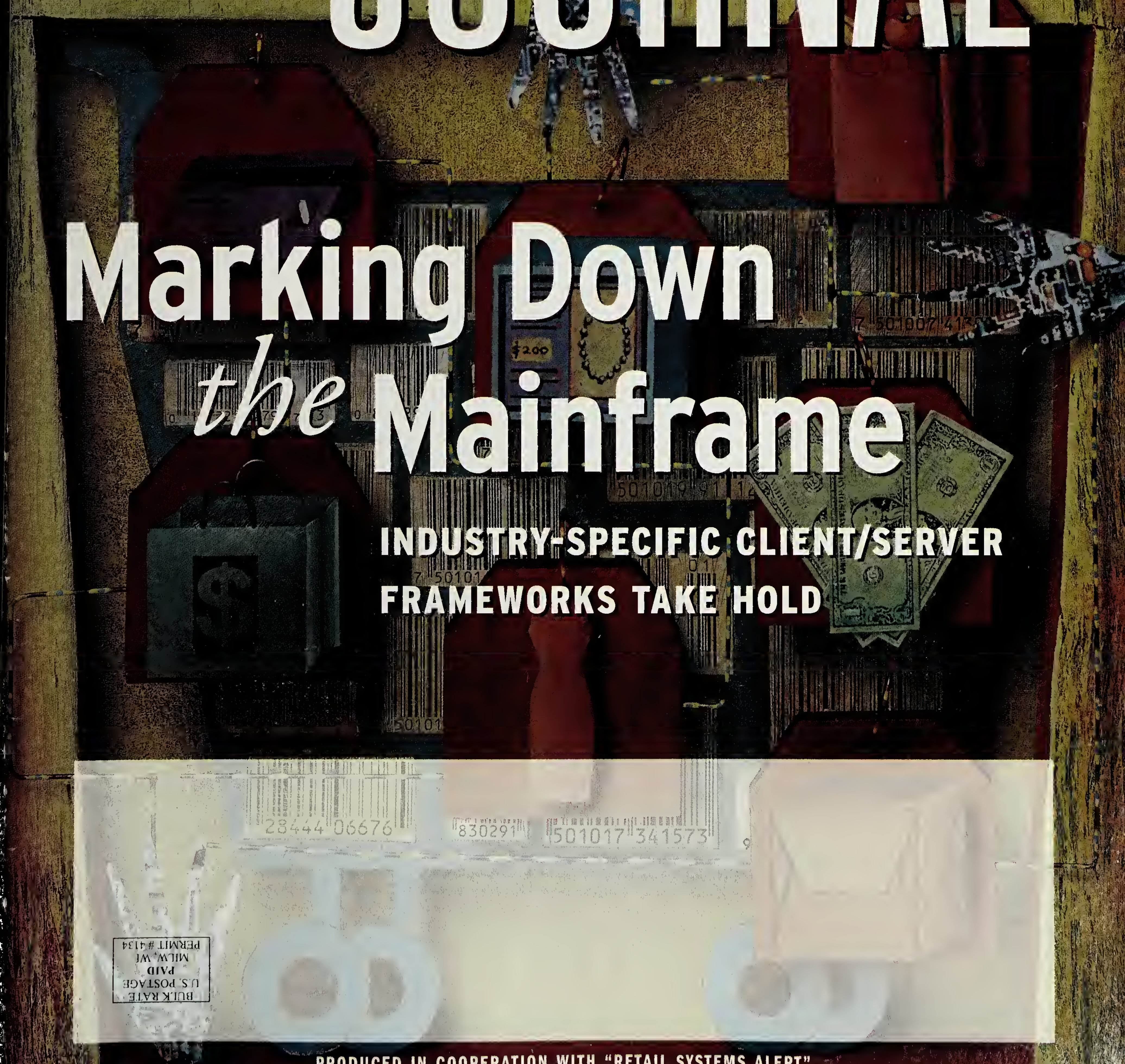

Marking Down *the* Mainframe

INDUSTRY-SPECIFIC CLIENT/SERVER FRAMEWORKS TAKE HOLD

PRODUCED IN COOPERATION WITH "RETAIL SYSTEMS ALERT"

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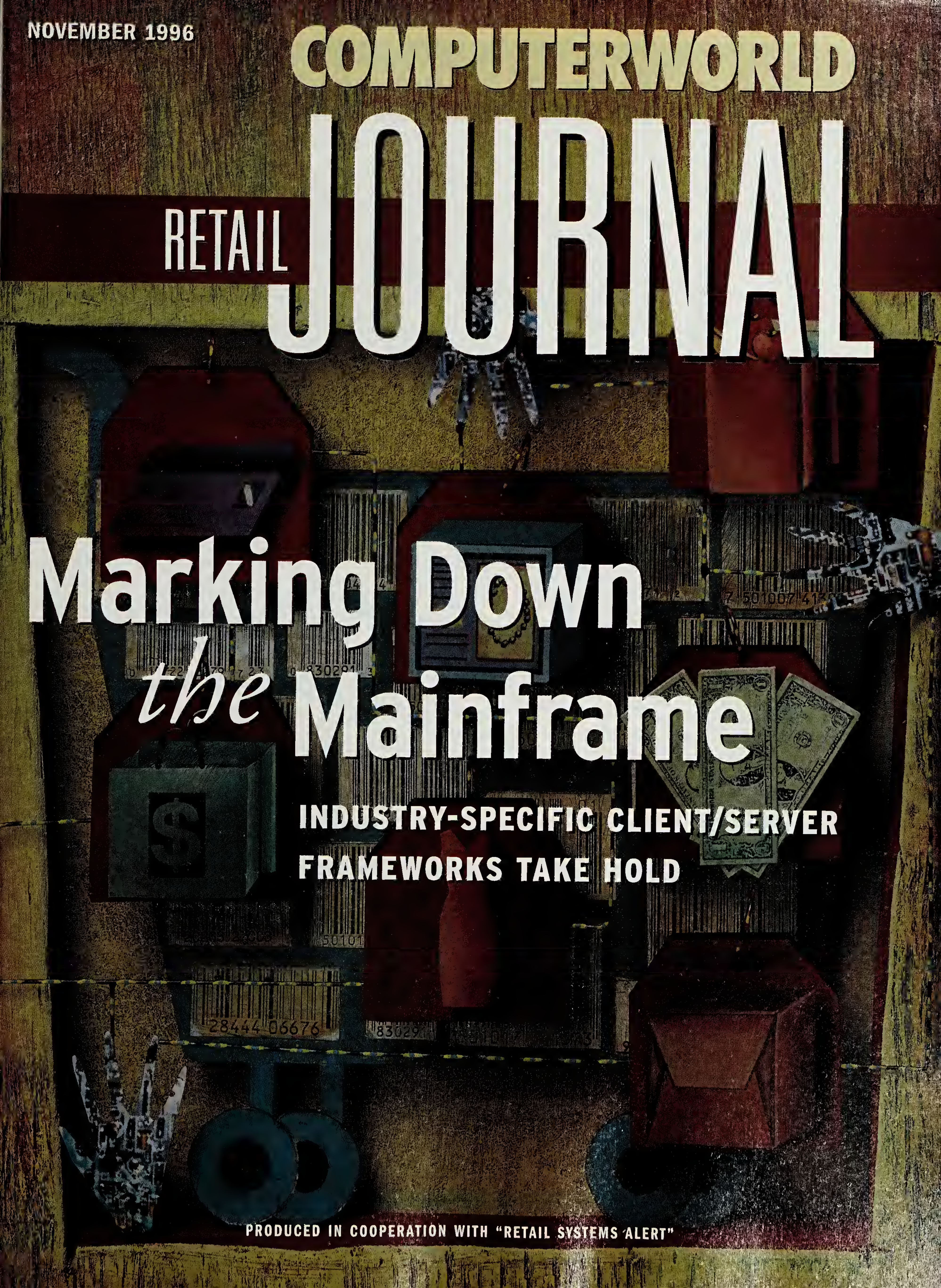

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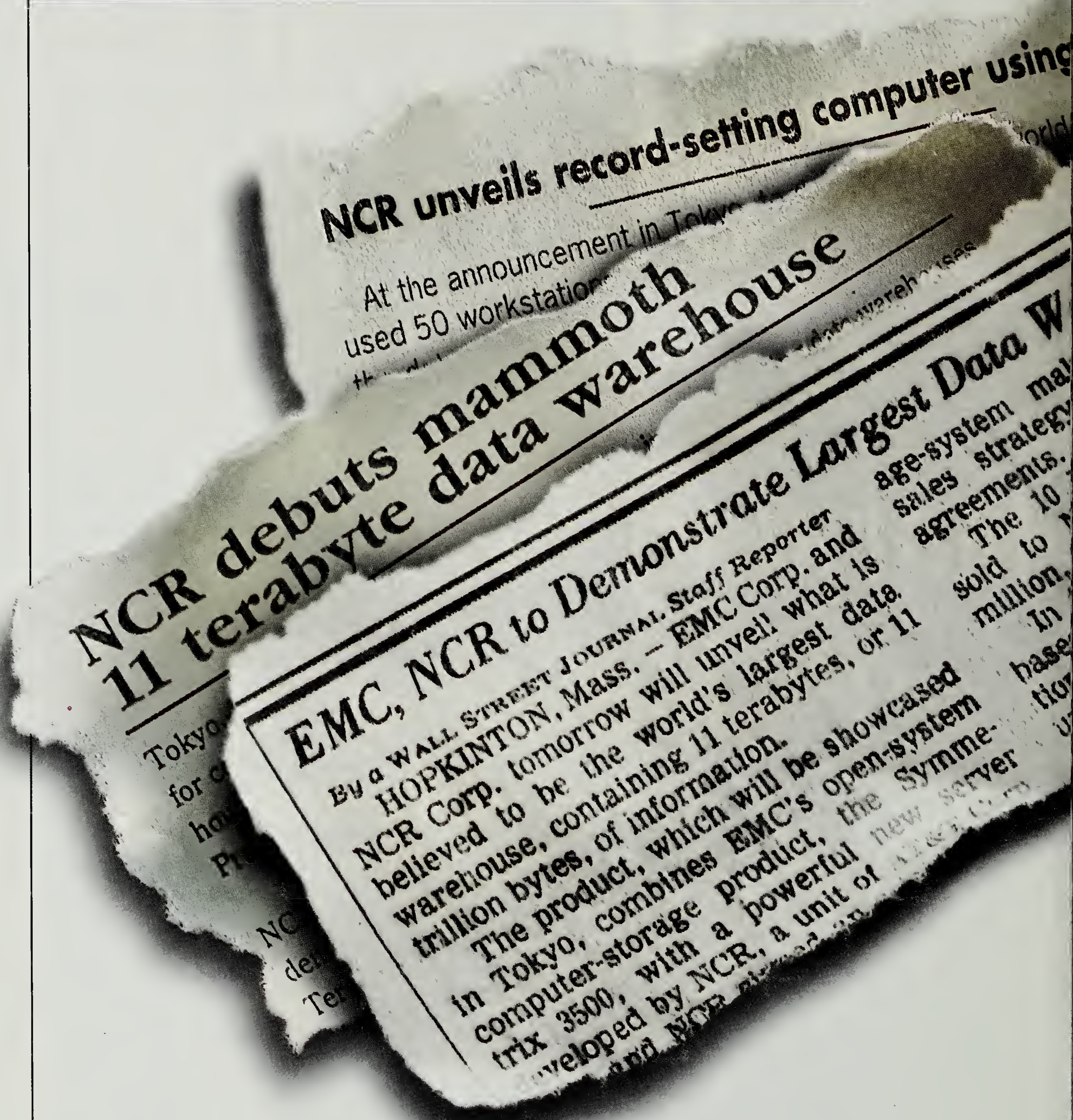

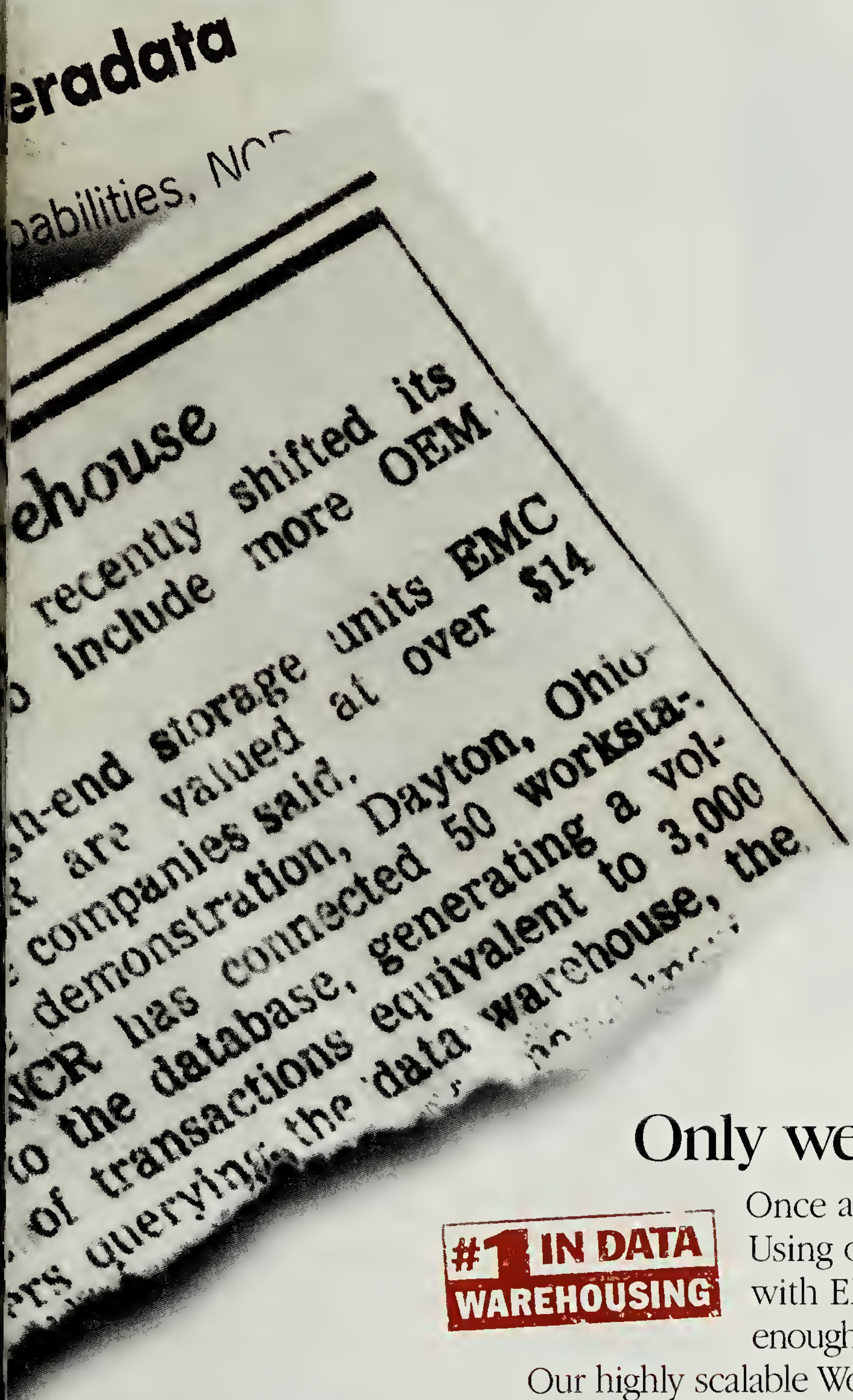

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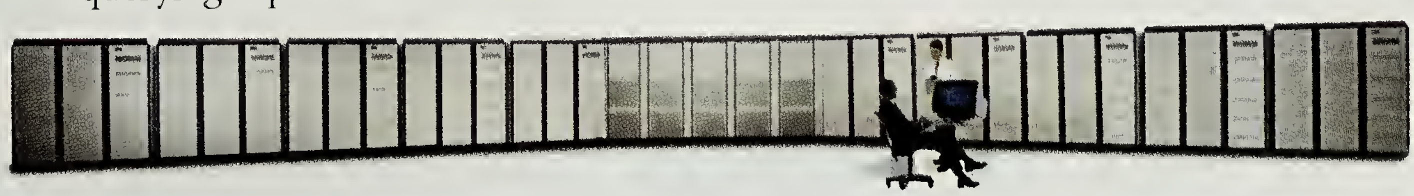

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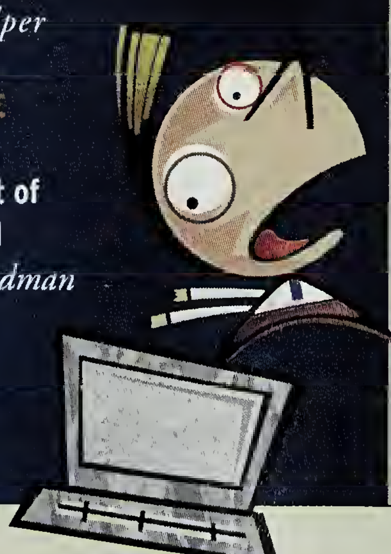

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COVER ILLUSTRATION BY MARIA RENDON

Web Site Makes Cents Out of New York City Buying Trips

Fashion Center kiosk helps buyers shop more productively

BY LESLIE GOFF

For retail buyers, time in New York means seeing the latest lines and brushing shoulders with fashion's elite. It's also one of the toughest business trips a buyer has to make.

In Manhattan's insular garment district, where trade secrets tend to be closely held, maneuvering through a day is a challenge for even the most experienced buyers.

A new World Wide Web site (www.fashioncenter.com) aims to alleviate some of that stress. The Fashion Center Business Improvement District, a nonprofit corporation that promotes and facilitates business in the garment district, has created what may be the first centralized source of information about New York's $20 billion industry.

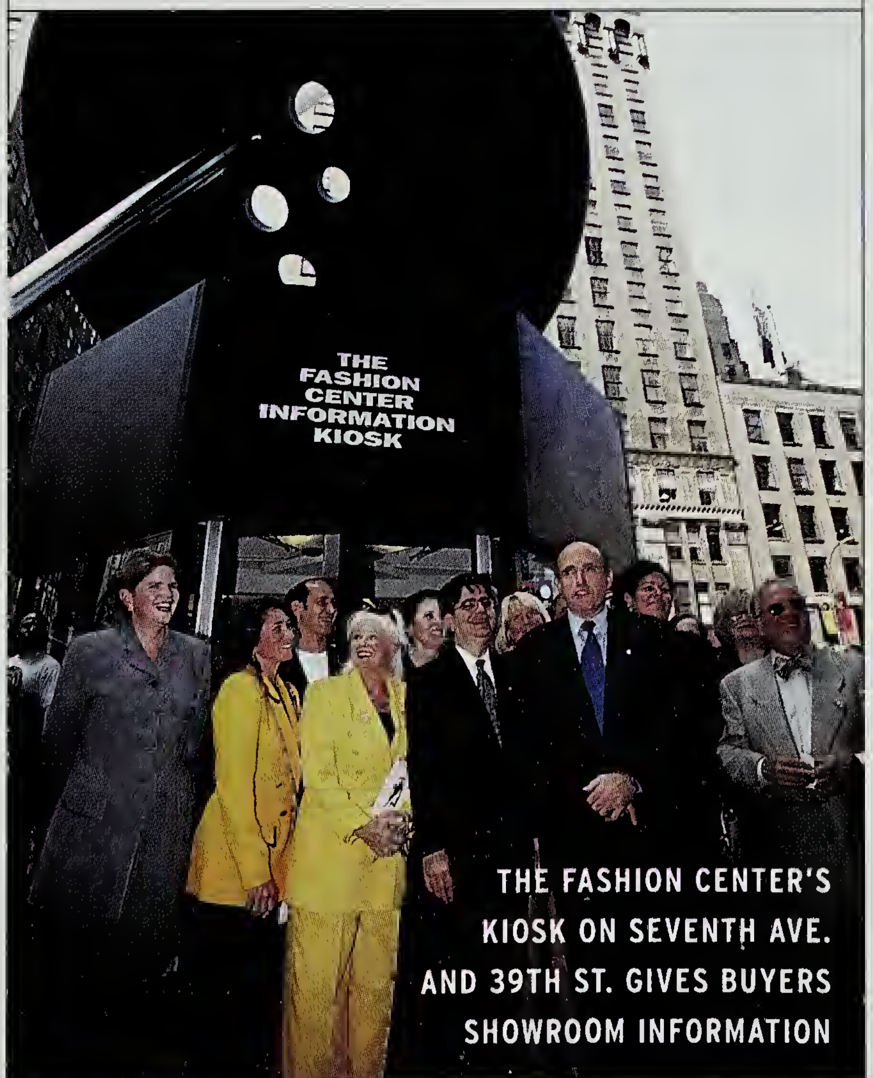
Barbara Randall, executive director of the Fashion Center, estimated that 25,000 buyers visit the city annually. She said the area needed an umbrella to house all the vertical information from the many different individual associations buyers usually turn to for information. "We tried to create a business tool that can tell people where to find anything, from the clothes themselves to retail sales figures," she said.

By porting its databases of apparel showrooms, price points, buying offices and other business contact information to the Web, the Fashion Center hopes to not only promote the city's apparel manufacturers but also help buyers optimize their time and productivity.

For instance, buyers can use the site to find showrooms in the same building, letting them add appointments to their schedule without adding miles to their day. They can get the scoop on each showroom by vendor name or even find a good restaurant.

"We want to facilitate business in New York," Randall said, "whether that means identifying new sources for you, telling you how to import goods into your country or helping you get from the hotel to the subway."

The Fashion Center is promoting its new site with an information kiosk in the heart of the district that offers passersby a dedicated "Web-station," a Sun Microsystems, Inc. server permanently trained on www.fashioncenter.com. (Sun, along with Informix Corp., LANcomp, Infomat Publishing and Webology Group, donated hardware, software and services to the project.)



THE FASHION CENTER'S KIOSK ON SEVENTH AVE. AND 39TH ST. GIVES BUYERS SHOWROOM INFORMATION

The site has the potential to be of particular value to buyers from smaller shops, which may not be affiliated with a buying office, a service that helps facilitate appointments and negotiate deals. But it still has some obstacles to overcome. Unless buyers have Internet access from home PCs, they may not get to use the site before traveling. Among large retail chains, "it's unlikely that they are providing Internet access for real business use," said Don Gilbert, senior vice president of information systems at the National Retail Federation, a Washington trade association.

Even if a retailer offers 'net access to buyers, getting them to browse is another obstacle the Fashion Center faces.

Plus, buyers are not in a position that ties them to their computers all day: "It's a touchy-feely job," Gilbert said. No matter how much a buyer prepares in advance, choosing the lines customers will buy is about seeing the color of the fabrics, feeling their texture and weight and seeing how they move on a model. Part of the job will always be about pressing flesh and kissing cheeks. ■

GOFF IS A FREELANCE WRITER IN NEW YORK.

Retex Offers Cooperative Advantage

Retailers join forces to benefit from joint buying clout

BY JENNIFER SCHMIDT

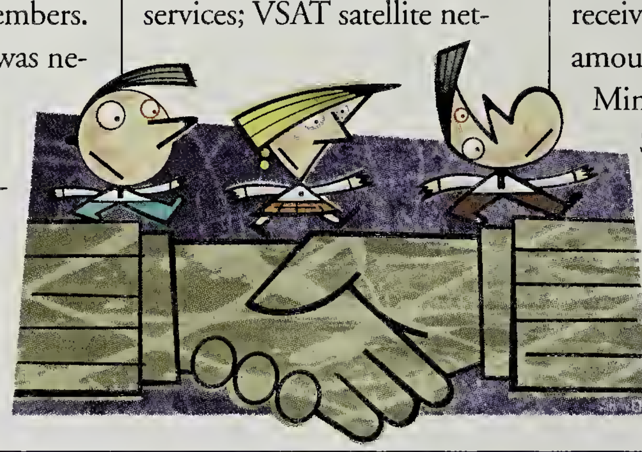
Fred Morsheimer, former vice president and chief information officer at Contempo Casuals, understood the advantage satellite communications would have for his retail stores. Yet the high cost of the technology had always been a barrier for all but the very largest retailers. Tired of turning down vendor proposals because the retailer could not afford it, he took action.

"I knew there was a large market for the middle-size retailer who could not afford their own satellite network. The concept that banding together would negotiate an affordable price and gain a competitive edge was the incentive I needed," Morsheimer said.

Fellow retailers joined forces, and Retex was born in 1992 as a nonprofit consortium with about a dozen members. "Our whole objective was negotiating a lower-cost service that provides better value, said Morsheimer, a Retex board member and now vice president of MIS at Trader Joe's, a grocery chain based in South Pasadena, Calif.

Retex's success speaks for itself. In four years, it has brought technology benefits and lower-cost services to its more than 1,400 members.

The types of services Retex helps facilitate include voice and data communications; Internet technology; teleconferencing and telemanagement services; VSAT satellite networks; and credit, debit and private label card processing. A master agreement negotiated with each vendor guarantees performance standards and a base price. The member company can then choose to take advantage of the discounted service and further customize its arrangement with the vendor. The vendor receives no guarantee on the amount of member usage.



MARK SHAVER

Minneapolis-based County Seat Stores, a chain of apparel stores, participates in the voice, data and satellite communications. It saves on long-distance phone

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STANDARDIZING SAFE DATA PASSAGE

Despite differences, MasterCard and Visa push common security spec

standards UPDATE

All's fair in love, war and business. And so goes the saga of the MasterCard International, Inc. and Visa International joint effort to develop a uniform security standard for safeguarding financial transactions across the Internet.

The credit-card companies, which were previously developing their own standards, reunited earlier this year. In June, they announced a common secure electronic transaction (SET) standard, which details a process that authenticates the consumer, merchant and bank in a World Wide Web financial transaction to prevent the fraudulent use of credit cards.

One month later, the two credit-card giants announced they would have different third-party providers issuing their digital certificates, the encrypted identification numbers that will be issued to credit-card holders and merchants who use the Internet. They are the key security element that authenticates the participants.

MasterCard chose GTE Corp. and its CyberTrust line of certification services and products. Visa gave the nod to VeriSign, Inc., a newly formed spin-off of RSA Data Security, Inc.

The latest move signifies that the two are still business competitors in the world of Internet commerce, with its enormous money-making potential.

Gina Jorasch, director of product marketing at VeriSign, said it isn't surprising that the credit-card companies chose different vendors. "It's a competitive market. The choice of two different vendors does not mean they have divided again. The digital certificates are still generated according to one common standard," she said.

"Because Visa has chosen us as their provider of digital certificates doesn't mean all banks are forced to use our service. Banks have the option to choose who they wish," Jorasch said, adding that because all certificate vendors will issue certificates according to one standard, there will be a built-in level of interoperability.

Mike Rothman, vice president at research firm Meta Group, Inc., said retailers and cardholders have to get used to their digital certificates coming from more than one provider. "There was extreme market pressure for MasterCard and Visa to unite on the SET standard. Now that they have, don't expect them to play nice."

Robert Olson, president and chief executive officer at Virtual Vineyards, which sells wine and gourmet foods over the Internet, said he doesn't think the split decision is a concern for retailers: "Our goal as a merchant is to get the money deposited into our account in the safest, least expensive and least painful way possible. The details of the process are something we leave to our bank."

— JENNIFER SCHMIDT

CONTINUED FROM PAGE R8

calls and voice conferencing and benefits from a satellite network that provides communications for point-of-sale and credit-card authorization. Ron Zweifel, vice president of MIS, said the discounts he gets from Retex can't be found anywhere else.

Another happy member, Tom Smith, CIO at General Nutrition Centers (GNC), benefits from the voice, data and credit authorization services. He said he's confident that if GNC chose to move into satellite technology, he could be there tomorrow with Retex. GNC savings have been a quarter-million dollars a year and are climbing.

Retex members range from very large retailers such as The Gap to much smaller retailers. Jane Small, director of sales and marketing at Retex, said they can all benefit. "Some of our vendors guarantee Retex members receive their lowest price," she said.

To date, Retex members have saved hundreds of millions of dollars through vendors' volume-discounted invoices, Retex monthly cash (refund) payments and dividends, Small said. Retex has given back more than $46 million in refunds alone.

It's hard to find a downside to Retex when you consider it's a consortium established and run by retailers for their own benefit. "At really no cost for the members to join, small to medium-size retailers will find it hard to beat the price advantage Retex offers," said Donna White, a consultant at Ernst & Young. ■

SCHMIDT IS A FREELANCE WRITER IN HOFFMAN ESTATES, ILL.

FTD CULTIVATES CHANGE

Hopes to install network computing, but questions linger

FTD Corp. is sowing some powerful seeds that early next year could yield growth dramatically different from that of your typical alstroemeria, pink carnation or Sonia rose.

The 86-year-old Downers Grove, Ill., firm is looking to use Java to radically change the way many of its 20,000 affiliated florists interact with FTD and one another. The big question is whether the $166 million firm has the technical acumen and infrastructure to effect a transition to thin-client, network-centric computing, said sources familiar with FTD.

To order flowers and supplies, member florists today use an assortment of dumb terminals and older-generation PCs that connect to Unisys Corp. Mapper-built mainframe applications via FTD's private, dial-up, packet-switched Mercury network. FTD acts as a payment clearinghouse, collecting 7% of the order fee and a $29 monthly network connection charge.

But maintaining and upgrading Mercury and the applications it delivers has become overly expensive and unwieldy for both FTD and retailers, said FTD Chief Information Officer Brian Shield. To lower costs and add functionality, FTD is looking to replace florists' shop devices with "Mr. Coffee" network computing devices from Sun Microsystems, Inc. that will run Java applets. Florists will use an intranet to access network application services behind its firewall.

Besides viewing order and pricing data, the new approach would provide electronic-mail capabilities and access to promotional data. "The challenge is to keep the customer base stable and as advanced as possible," Shield said.

FTD is testing a variety of application development approaches. One would require most applications to be rewritten using Java. Another would have back-end Mapper applications delivering services to Java clients. FTD is gravitating toward the hybrid approach for starters, though simulation and performance testing will dictate which way it goes.

But observers are unsure of either approach, saying FTD's existing network will not lend itself to Java enablement. Moreover, heavy turnover in its information systems department has left FTD without personnel knowledgeable about its legacy systems. "They do not have the infrastructure to [do] this," said John Grove , a former FTD project director of network services who left six months ago to work at a software consultancy. He pointed to FTD's Unisys 2200 hubs, a packet-switched proprietary network with 1,200 bit/sec. modems, a host of Z80 dumb terminals, and first- and second-generation PCs installed at florist sites as the greatest hindrances to the transition.

A former FTD IS staffer, who asked not to be named, added, "I'm not sure they really have an architecture. They believe that with [Sun CEO Scott] McNealy on their side, if they spend enough time and money they can make something happen."

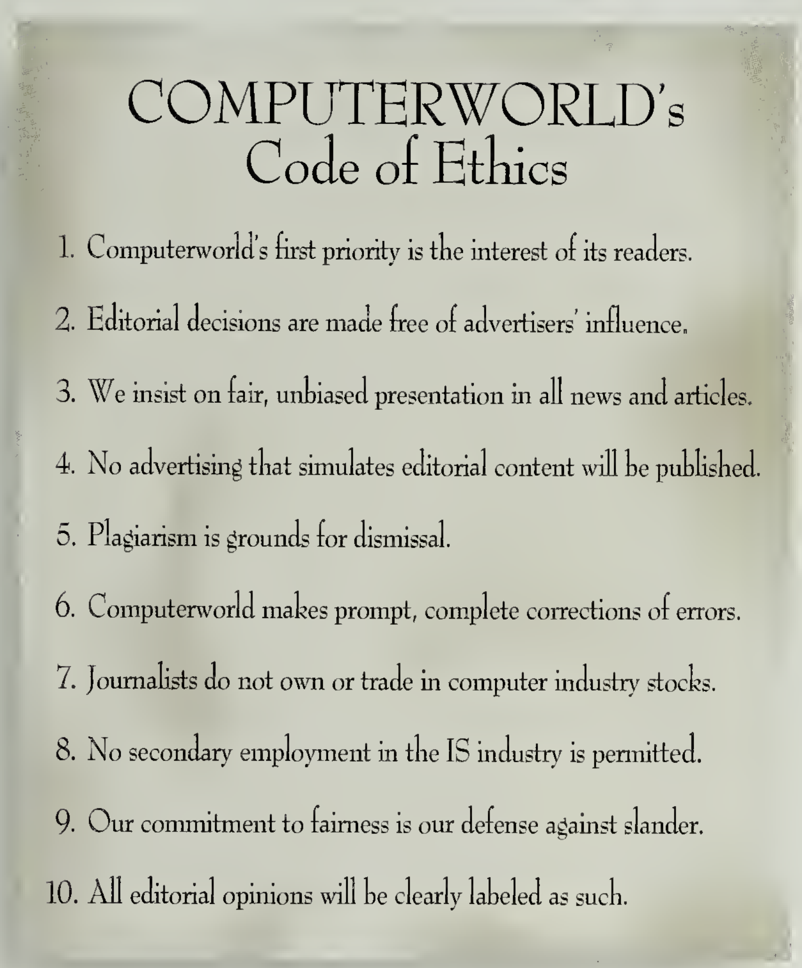
Also unclear is how much money the project will cost and save involved parties and how florists will pay for the Java machines. "This will cost them $18 [million] to $20 million to do," Grove estimated. "Hey, [FTD] still has a pile of 386s on the books for $10 million."

Shield did not return repeated calls to discuss these and other issues.

It won't be an easy sell to members, given a competitive market that has made it lucrative for florists to work directly with consumers ordering flowers over the phone, via the Internet or at the supermarket.

"You've got two totally opposite camps," Grove said. "One wants cheap ways to do business with phone and fax, the other side wants mainstream PCs with Windows and off-the-shelf accounting packages to run their business."

– ALAN ALPER



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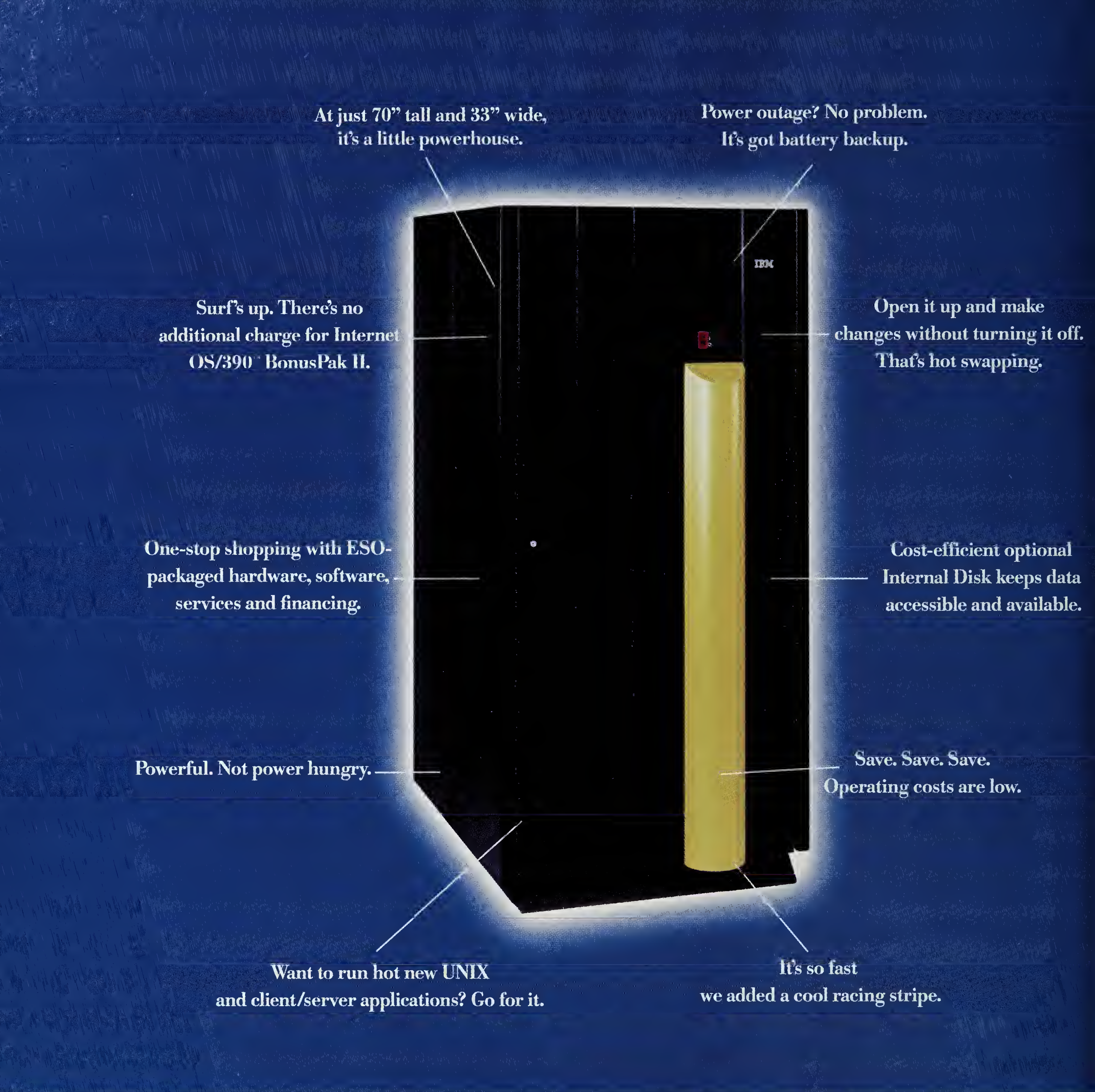
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FRAMED *for* RETAIL

BY JULIA KING

WITH 50 HOME PLACE STORES UP AND RUNNING, CIO JOHN HNANICEK SAYS IT'S TIME TO INVEST IN STRATEGIC SYSTEMS

DANIEL LEVIN

Retailers may have been late to the client/server party, but now that industry-specific packages are starting to hit the market, some are moving ahead at full speed

WHEN IT COMES TO CLIENT/SERVER computing, the vast majority of retailers have been anything but fashion-forward. Mass merchandisers, department stores, grocery chains and specialty shops have all pretty much clung to proprietary mainframes, long an industry classic.

But now that off-the-rack retail software is finally beginning to hit the market, the industry's earliest adopters — many of them beta sites for the new integrated retail packages — are charging into massive implementation projects at a blistering pace. Project schedules are being set in months, not years.

Retailers are only just now beginning to make the move to more open, client/server systems. Many are taking a toe-in-the-water approach, implementing packaged data warehouse systems as front ends to existing mainframes.

"The other strategy is to buy the packaged client/server systems that are coming out right now," said Vahe Katros, a retail automation consultant in Boston. "Retailers are in the adoption cycle now. With the new generation of software being developed over the past two to three years, there will be an incremental migration of legacy systems to client/server."

As for the retail software vendors, Retek Information Systems in Minneapolis, Richter Management Services, Inc. in Montreal and JDA Software, Inc. in Phoenix all offer integrated client/server packages designed to manage everything from purchase orders and vendors to pricing and inventories. SAP AG's new client/server retail package is scheduled for release in the middle of next year (see story page R17).

More important, the new systems give retail managers access to critical information once shut away in highly inflexible mainframe systems.

"Client/server is wonderful for taking IS out of the middle," said Jeff Orton, director of merchandising and advanced system technologies at Wilson's, The Leather Experts, a Minneapolis-based specialty retailer.

But retailers are also facing some of the same cost, management, systems integration and training challenges that surfaced in the 1992-1993 time frame, when the first integrated enterprise packages, such as SAP's R/3, were introduced.

On the hardware side, system scalability is a big issue.

"Retail is primarily a mainframe industry because it is so data-intensive. They need a lot of computing power to process millions of transactions a day," said Judy Newdom, a principal at Computer Sciences Corp.'s (CSC) retail practice in Cambridge, Mass. "The other big issue is cost. To deploy client/server applications out into stores requires a very large investment in hardware and software. For companies with 500 stores, that's a huge investment," Newdom added.

Meanwhile, retailers typically aren't big IS spenders.

"Retailers generally take a percentage of sales and dedicate that amount to the IS organization. But if sales grow by 5% and IS gets a 5% increase, that's not enough to go out and refresh all of your systems," said Bob Berger, president of Berger Advanced Management Services, a Hillsboro, Calif., consulting firm specializing in retail automation. In actuality, retailers' IS budgets are much lower than even 5% of sales, Berger added. The rule of thumb for IS spending is more like one-half of 1% to 1.5% of sales, he said.

But as certain retailers see it, they now have no choice but to overcome these hurdles. They've watched client/server prove in other industries that it can furnish the flexibility and scalability that's imperative to stay alive in today's lightning-quick retail arena.

"Retailers don't necessarily like to be on the bleeding edge, but the specialty retailing business is very fast-moving," said David Tidmarsh, vice president of logistics and chief information officer at Wilson's. "The information systems have to be flexible enough to change with the business. In the mainframe world, it takes too long to change."

Wilson's, for example, operates a mix of 400 permanent stores and, at different times of the year, another 400 kiosk outlets in airports, malls and other high-traffic locations. The buying habits of its customers also vary widely and change quickly from location to location.

Three years ago, executives at Wilson's realized that its aging mainframe-based merchandising system couldn't provide the right information fast enough to respond and, optimally, anticipate changes in customer preferences and purchasing trends. So in 1993, Wilson's went to work on a new strategic IS plan that included implementing JDA Software's client/server-based Open Database Merchandising System on Hewlett-Packard Co. Unix platforms.

The decision was based on two key factors. "JDA already had a very strong name and was well respected for its AS/400-based retail system," Tidmarsh said. The other reason was that as a beta customer, Wilson's IS team would have the opportunity to help shape what would become JDA's client/server retail offering and build in functions geared specifically toward specialty retailers.

Also in 1993, Wilson's brought in a new management team headed by Tidmarsh and Orton to lead the imple-

Please turn to next page

Continued from page R15
mentation effort. "We were brought in because senior management realized the need for radical thinking and the need to challenge the norms," Tidmarsh explained.

What the two didn't want to change significantly, however, was the retailer's IS staff, which already had an understanding of Wilson's business. So they invested heavily in training for the company's base of largely mainframe programmers, who were then placed on teams with more seasoned client/server personnel brought in from outside the company.

One of the biggest challenges early on was assuaging mainframe staffers' suspicions and fears of a new management team. "When you start to assess people's skills, employees tend to think you just want them to show that they don't know what they need to know," Orton said.

To overcome these suspicions, Orton continually emphasized the value of IS staffers who already knew Wilson's business. "I think we surprised a lot of people in having the desire to change legacy systems but keep legacy people," Orton said. "But we were also building a product that JDA would be able to market to other soft lines retailers," he added.

This frequently meant changing Wilson's traditional way of doing business and adopting more streamlined methods, Orton said. "When you build a system in-house, you put in the entire kitchen sink. This is because every retailer thinks the way they do things is extraordinarily unique."

In helping design the JDA product, "we had to go in with our eyes open to the fact that we would fundamentally change ways we do business, whether that was how we executed a purchase order or price change," he said.

Under JDA's merchandising system, Wilson's managers now have far greater access to inventory data by store, which in turn enables them to make informed decisions much more quickly, Orton said. "The payback is the right product in the right place. That can equate to big dollars," he noted. Orton said he did not have a return-on-investment dollar value, but he knew it was positive.

hard CHOICES

After selecting Retek's software package, ShopKo had its work cut out for it in selecting the hardware. The company wanted reassurance on the robustness of IBM's SP2 massively parallel processor.

During five weeks of testing at an IBM facility in Kingston, N.Y., a team comprised of representatives from Oracle, Retek, IBM and ShopKo "intentionally tried to overload the machine, doubling the size of the database and tripling the number of servers as a way to get assurance that the system could expand relatively quickly," CIO Jim Tucker said. "That all turned out to be very successful," he added.

Tucker said ShopKo has also realized a huge jump in programmer productivity under Retek's Oracle-based development tools.

"We're putting out more code per programmer than we ever could with Cobol by using database development tools, computer-aided software tools and standard output forms, all of which Oracle provides" as a standard part of its database management system, Tucker said.

Specifically, ShopKo is integrating the Retek merchandising package with several other packages, such as warehouse and forecasting systems, through a single Oracle database on the SP2 processor.

Also positive about client/server is The Home Place, a privately held chain of 50 home furnishing superstores that is doubling in revenue every year. It is replacing virtually all of its mainframe-based systems, including point-of-sale, financial and retail applications, with packaged client/server software, including Richter's merchandising package — all over a six-month period.

And that's just on the application side. The specialty retailer has also built an enterprisewide networking and computing infrastructure from the ground up. This includes a frame-relay, wide-area network, Microsoft Corp. Windows NT-based networks and workstations at its 50 stores and an HP Unix-based server and Oracle Corp. database at corporate headquarters in Valley View, Ohio. The cost of the project is several million dollars.

"The pace of change in the retail industry doesn't allow for traditional IS cycles, said Home Place CIO John Hnanicek. "Given our growth, we have a business that's fundamentally changing every six months."

Home Place, which is just two years old, is opening a new store about every 11 days. Its current mainframe retail package simply can't handle the rapid change and growth, Hnanicek said, adding that he knew this would happen two years ago when the system was installed. Still, the company went ahead with the Cobol package, Retail Advantage from DataVantage, Inc. in Cleveland.

"When you're a pure start-up, all of your capital must go to opening stores. It wasn't time to invest in strategic systems until critical mass was achieved," he explained.

But now, with 50 stores up and running, that time has come. And surprisingly, the biggest hurdle, Hnanicek said, has had little to do with the technology itself. Rather, it's more management-related.

"The most challenging part of this whole project has been coordinating the activities of all the vendors in such a way that allows the critical issues to be solved on time and on budget," he said. The solution, he added, has been "communication, communication, communication."

The overall hardware and software implementation has been divided into six projects. Each project group holds weekly meetings with vendors and users. Also, a strategic project committee comprised of representatives from the six teams meets once a week with all vendors to focus on integration issues.

ShopKo Stores, Inc., a $2 billion, 130-store discount chain based in Green Bay,

Wis., is also expanding quickly. Among other things, ShopKo is in the process of acquiring Phar-Mor, a chain of more than 70 discount drug stores.

As CIO Jim Tucker sees it, packaged software offers the fastest and cheapest route to upgrading ShopKo's 17-year-old, mainframe-based "horror story" of a merchandising system and bringing new stores online. ShopKo is implementing Retek's merchandising package, but it is also customizing the software extensively to meet specific business requirements.

"At one point, Andersen Consulting had proposed a custom-written client/server merchandising system. But the cost was huge," Tucker said.

Also, "it would take several years [to implement] and deliver about two-thirds of the functionality we needed to do our business. So it was really cost that drove us to a packaged solution," he added.

ShopKo's 1994 selection of the Retek package, which incorporates Oracle's programming language and relational database management system, "came down to a technology decision," Tucker said. ShopKo had also considered Radius Corp.'s client/server retail package but was hesitant to implement the Ingres database technology the Radius product then used.

"We felt there wasn't a strong enough future for Ingres and if we were going to saddle a new horse, we wanted to saddle a horse for the future, not the past," Tucker said.

But the bigger unknown was on the hardware side, with IBM's then brand-new SP2 massively parallel processor. ShopKo insisted on running extensive benchmark tests on the hardware and software before committing to any purchases (see story page R16).

But just how many retailers have the time, money and technical resources to undertake similar systems integration and benchmarking projects remains to be seen.

"Client/server can be an adventure in technology, and there are some customers who aren't willing to be that adventuresome," said Tom Proud, chief financial officer at JDA.

As a result, JDA, for one, intends to continue supporting, enhancing and marketing its traditional IBM AS/400-based retail software alongside its newer, client/server-based Unix version.

Overall, CSC's Newdom contended that retailers now adopting client/server technology "are finding it very expensive and that it takes longer than planned."

But this will change, she concluded, "as more and more application suites and off-the-shelf software that has been tested and proven becomes available." ■

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SAP COVERS NEW GROUND

SAP AG'S R/3 SOFTWARE FOR retailers has yet to see the light of day. But that hasn't stopped users, analysts and, not surprisingly, SAP's competitors from expressing a general wariness of retail software created by a vendor whose roots are in the manufacturing business.

"SAP certainly needs to be reckoned with because they've proven they have the ability to get into any market they have a mind to," said David Tidmarsh, vice president of logistics and CIO at Wilson's. "But I'd still be concerned about SAP in retail from the standpoint of how you'd manage the scope and effort of an R/3 project. I also don't know how much SAP even knows about the retail business," he added.

"If [R/3 for retail] is anything like its cousin, it'll be very large and very expensive to put in," predicted Judy Newdom, a retail analyst at CSC.

On the other hand, one of the key benefits of a retail version of R/3 is streamlined implementation. Unlike the more generic versions of R/3 installed at most SAP user sites today, R/3 for retail contains retail-specific business processes. This will save retail users a significant amount of time configuring the software to their industry requirements.

SAP announced its plans to crack the multibillion-dollar worldwide retail industry with a retail version of R/3 in June. A handful of beta sites are due to receive the package by year's end. General availability of the new system, known as R/3 Retail, is scheduled for mid-1997.

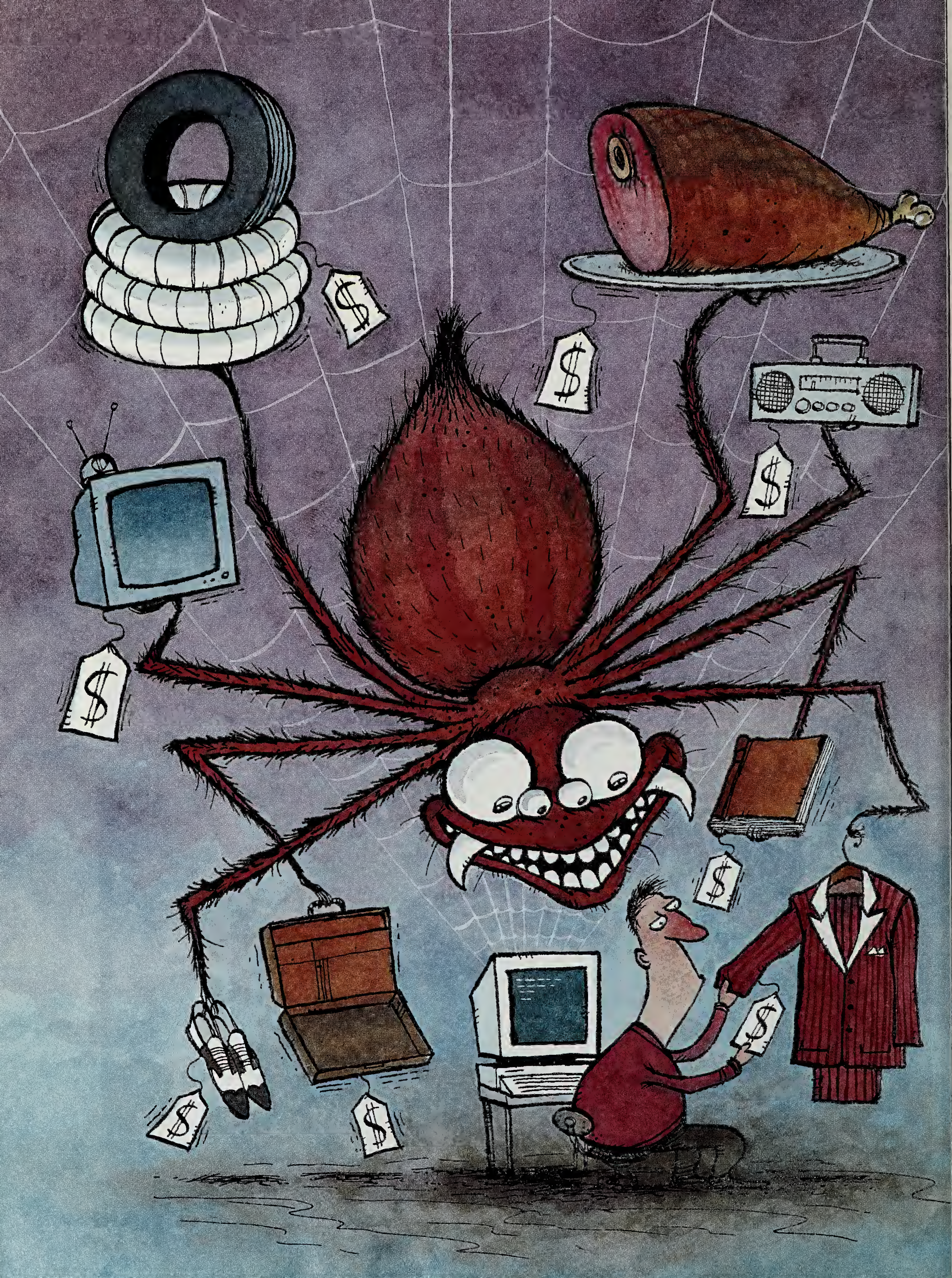
A team of 80 retail experts, as opposed to software developers, has been working on SAP's retail product since 1994, when SAP acquired Dacoss, a retail consulting company in Germany. Among other things, the group has developed more than 300 new retail-specific business processes, which will be part of the new retail package. These include the ability to funnel point-of-sale data from stores directly into the R/3 enterprise system.

SAP is targeting the new system to retail players "in every line of the trade," including department stores, convenience store chains and discount clubs, according to John Nelson, director of SAP's retail center of expertise in Chicago. SAP has also been stress-testing R/3's overall system performance in conjunction with Metro AG, a $43 billion European retail and wholesale empire that is processing all of its financial transactions under R/3.

Bill Macfarlane is vice president of IS at one of SAP's anticipated retail beta sites, a $1 billion-plus specialty retailer with 570 stores in 14 countries. The R/3 system's much-vaunted multilingual and multicurrency capabilities are two key reasons his company opted for the new SAP software, Macfarlane said.

Beyond that, he said he has yet to see firsthand precisely what other retail capabilities the new software will offer.

"We're dealing with a piece of software in some state of completion," Macfarlane said. "But with the amount of revenue that SAP spends on research and development, you know they're in it for the long haul."



the mall MOVEMENT

WITH CYBERMALLS CLOSING LEFT AND RIGHT, RETAILERS ARE TURNING TO COMPETITIVELY PRICED WEB HOSTS TO WATCH OVER THEIR SITES

BY CHERYL GERBER

Launching a retail operation on the World Wide Web is tricky business. Whether you hire a Web hosting provider, join a cybermall or build your own site, there are more changes and factors than meet the eye.

For one, retail options on the Internet have morphed in recent months. The closing of two cybermalls, MCI Marketplace and eShop, shrank the fledgling market. Concurrently, the Web hosting market swelled, with AT&T Corp., Sprint Corp. and MCI Communications Corp. all now in the Web hosting business.

The more competitive Web hosting market has translated into better pricing for retailers, making Web hosting a more enticing prospect. In July, for example, AT&T introduced a low-entry Web hosting plan for $395 a month and a onetime $1,000 registration charge for 100M bytes of storage and 200M bytes per month of data downloaded.

Prices will likely continue to drop as the market grows. The Yankee Group in Boston predicted the dollar value of the Web hosting market will exceed $4 billion by 1999. "There are many more adequate hosting options now than there are mall options," said Greg Wester, Yankee Group's director of Internet interactive markets research.

Meanwhile, Wester and others see retail trailblazers who are entering their second and third generation of Web sites and are now more open to outsourcing all or part of the job. "Web hosting is part of the IT outsourcing phenomenon. Companies are saying, 'This is not my core business,' " said Victor Wheatman, vice president of electronic commerce strategies at Gartner Group, Inc. in Stamford, Conn.

Retailers have found that the effective design, building, merchandising, maintenance and marketing of one's own retail Web site requires significant investment and intellectual capital in a broad array of areas, including graphic arts, object-oriented programming, TCP/IP networking, Unix or Windows NT servers, security and integration with back-end database and accounting systems.

Unless an information technology shop has that, with in-house Webmaster expertise dedicated to continual business and technology oversight of its site, it should consider hiring a Web hosting provider, Wheatman and others said.

Although a large company could have more control over its own destiny by building and managing its own Web site, it might not be the most cost-effective route for small and midsize companies, given the better pricing today of Web hosting providers.

"You don't have any idea how many people will hit the site, and you need to be sure you have enough bandwidth available to handle it. T1 lines cost thousands of dollars a month from the phone company, whereas you could benefit from a Web hoster's bandwidth. I recommend letting someone else host it until you have the technological capacity and the business model to bring it in-house," said Kurt Carter, president of Florist Systems Corp. in Ottawa, a technology and business consultancy, and IT operations manager at online retailer Blooming Cookies (see story next page).

There is also the potential for security risks in setting up and managing your own site. "If you've got a Web farm hooked up to a LAN, a creative hacker can get in and access your corporate data. It makes sense to have your Web site located outside the corporate facility," said Fred Parker, director of marketing at Cerfnet Services, Inc. in San Diego.

An Internet access provider can also provide redundancy or multiple network access points that would be costly to buy. "Because we have multiple T3 connections on the backbone, there is never a time when you can't get through to the site. That's the advantage of redundancy," Parker said.

Cerfnet's Web hosting services start at $99 a month for speeds at ISDN-level and below and a 5M-byte Web site on a T3 backbone with redundancy. The next level up, called Cerf N' Web, is a fully hosted site with 20M bytes of storage for $250 per month.

Many Web hosting providers, such as Cerfnet and the telecoms, are also Internet service providers. But they do not provide Web design. That can cost as little as $1,000 for just a presence on the Web to up to six figures. "The average Web site we design runs about $1,800," said Judy Lewis, Web

Please turn to next page

DAVID CLARK

Continued from page R19
design and marketing consultant at Home Page Productions in Woodstock, N.Y.

Retailers will have their pick of Web hosting providers by year's end. Microsoft Corp. will announce late this fall a new channel of hosting service providers that will grow the options further. "Retailers will be able to get online for a lot less by working with these hosting providers than by doing it themselves or leasing space on a cybermall," said Jonathan Weinstein, group product manager for the Microsoft Merchant system.

As a result of folding in eShop's technology, Microsoft will introduce this fall Merchant server software and Merchant workbench, tools for building store design, product display, customer profiling and decision support on Windows NT server software. The Merchant systems will also provide order capture and processing, routing software and merchandising tools. On the client side, Microsoft is developing a shopping utility that will eventually be part of the Windows operating system.

Despite the closing of eShop and MCI Marketplace, the cybermall business will build up steam once again. IBM's World Avenue is set for launch this fall, with approximately 18 retailers in the mall. While the strength of the World Avenue offering includes its data mining and intelligent agent tools, its pricing is not for the faint of heart. The cost of joining IBM's World Avenue is $30,000 per year, with a $2,500 per month hosting fee and a 5% commission on sales.

However, it doesn't have to cost that much to lease space in a cybermall. 3Dnet, Inc. in Fort Lauderdale, Fla., charges a onetime start-up fee of $3,000 plus 15% commission on sales. The start-up fee includes a three-dimensional store in the mall designed by 3Dnet, data entry and conversion, account management, secure purchasing and links from the home page to product descriptions. However, retailers must supply their own Internet access provider.

Logon Sports, Inc., an online sporting goods store with 3,700 products from 80 manufacturers, has just signed up with 3Dnet. "Since [3Dnet] is getting a 15% commission on the sales, they are more motivated to keep everything current," said Jason Tietjen, Logon Sports president and founder.

Tietjen had his own Web site from August 1995 until June 1996. "We were doing 30 to 60 orders per week, with an average ticket item of $30," he said. "We netted $80,000 in that 10-month period," he said. Tietjen said he liked the business plan and ordering system of the 3Dnet mall, so this fall he joined.

However, cybermalls will continue to morph in upcoming years, according to Marty Tenenbaum, chairman of CommerceNet, Inc. in Menlo Park, Calif. One form likely to emerge is a logical rather than physical location. "A mall of the future is a product search engine that has learned about you," Tenenbaum said. With the minimal overhead in no physical inventory, no building and few employees relative to the size of the business, virtual superstores could succeed, he said.

"Nobody knows the exact shape of things to come. It's changing too fast," Tenenbaum said. "But this is no spectator sport. You have to jump into the market. You can't afford to sit by and watch." ■

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Blooming Cookies NOT CRUMBLING

Blooming Cookies, Flowers and Baskets, Inc. in Atlanta joined MCI Marketplace in September 1995, full of promise that the muscle of a large telecom player such as MCI would bring exposure and marketing expertise to the table.

So when MCI closed Marketplace in June, Blooming Cookies started looking at other retail options on the Web. First, the company changed its URL from www.internetmci.com/marketplace/blooming to www.bloomingcookies.com.

"We know we gained some new customers and increased our exposure [via the MCI mall], but our URL was so outrageously long that many people couldn't find us," said Ashley Ghegan, president of Blooming Cookies. "The simplicity of the Web address is critical to the success of doing business on the Internet."

MCI helped it start the transition by calling Internic in Herndon, Va., to register the new domain name. But Blooming Cookies paid to register the new name.

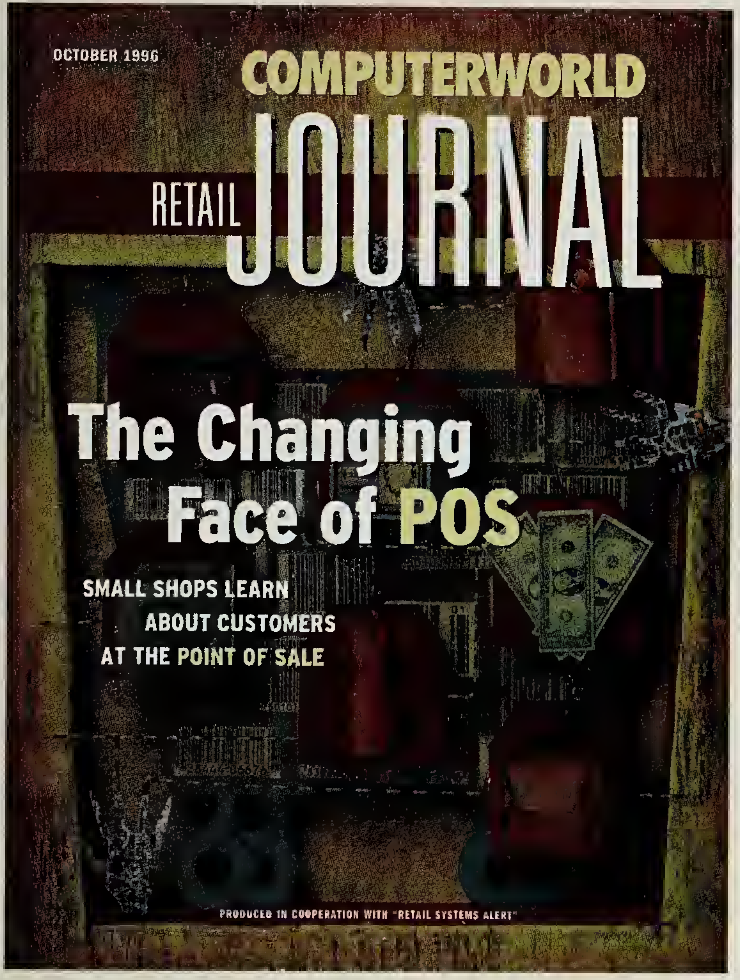
"There was a waiting period of one day for the search, $100 to register, and it'll be $100 every two years to maintain the classification," said Kurt Carter, Blooming Cookies' information systems manager and president of Florist Systems, Inc. in Ottawa, a consultancy specializing in the florist and mail-order gift market.

Carter is studying benefit vs. cost formulas for outsourcing part of the Web site. One likely scenario would be to hire an Internet service provider rather than leasing a dedicated line. Another would be to outsource a piece of the Web site administration or hire a Web hosting provider for partial account management.

Carter hopes to complete the benefit vs. cost studies and make a decision in a month. Regardless, a top priority is to ensure that the front-end Web site is integrated with the back-end accounting and database system.

Blooming Cookies is a PC shop connected via an Artisoft, Inc. LANtastic LAN. It has no Unix expertise, so when order data came in from the Sun Microsystems, Inc. SPARCstation with proprietary software MCI provided, the data didn't integrate with the PCs. Each order had to be retyped in ASCII format into the company's back-end order entry system. As a result, Blooming Cookies is now redesigning its order entry form with an interface to the back-end system to enable front- to back-end integration.

Computerworld Retail Journal



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Breaking Out of the ROI Mold

By keeping top management attuned to financial and technical risks, IT executives are not confined by the original ROI metrics.

BY TOM FRIEDMAN

Retail IT executives undermine critical strategic initiatives when they strictly use ROI to rationalize systems investments. Because data warehousing and other strategic projects are required to compete and survive, many IT executives argue that it is foolhardy to focus on whether systems will have a precisely calculated ROI.

For example, data warehousing has allowed many retailers to leverage their operating data through ad hoc queries for the first time. By facilitating queries of sales, inventory, receipts, markdowns and gross margins, retailers have filled an intolerable gap in decision-making capabilities. But views differ on counting every penny invested in such systems.

Historically, top management has required retail IT executives to conduct a detailed analysis for all strategic initiatives — still the modus operandi at most retailers.

"I think every project should either be accompanied by a [cost/benefit analysis] or by a qualitative list of strategic benefits that at some point translate into or support the achievement of company goals or which in the future translate into hard financial benefits," said Brian Sobelman, a merchandising systems executive at Bob's Stores, a 36-store soft goods retailer on the East Coast. "Our projects do not get by a systems steering committee without a CBA. For example, by making modest claims about better (i.e., less costly) markdown decisions, we justified a markdown management system with payback in 12 to 18 months."

Writing in his new online forum on Retail Info Central (www.retail-info.com), former Kmart CIO Dave Carlson argued that it is unwise to put a price on such strategic investments: "I have always believed that in fact the most important systems are often those which are strategic and by definition have benefits which are not well understood. I suspect that American Airlines' Sabre system was not cost-justified but still changed the airline business forever."

Carlson has argued this better than most retail IT executives. For example, while at Kmart, he gained boardroom approval for the first multitasking Unix in-store systems and merchandise data warehouses in the industry.

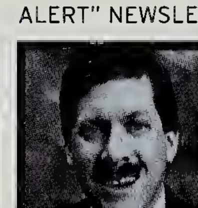
At the time, many IT executives criticized Kmart's aggressive approach to systems investment. But views have changed because many retailers require advanced systems to compete in this rapidly consolidating industry.

Another leading CIO asserted that retailers should continue to conduct ROI analyses but not use them as the sole criterion for decision-making. "Executives make key strategic decisions based on insight or gut," said Howard Edels, senior vice president and CIO at the 1,200-store CVS drug store chain. "Then they use financial numbers to get a sense of cost benefit. But the cost will only guide how they will proceed, not if they will stop."

Despite these diverse opinions, new financial and software practices could lead retailers away from traditional ROI models. For example, Boston University professors are testing the Options Model, under which IT executives evaluate the risks of systems investment decisions in the evolution of a system.

By keeping top management attuned to financial and technical risks, IT executives are not confined by the original ROI metrics. Rather, they are measured by broad-based, thorough IT planning and exceptional execution. This lets them leverage and build on top management support for systems investments.

Even with the arrival of new attitudes and financial models, IT executives will always have difficulty arguing for strategic investments. But the dynamic, short-term nature of retailing requires them to move their top management away from unrealistic ROI practices. ■



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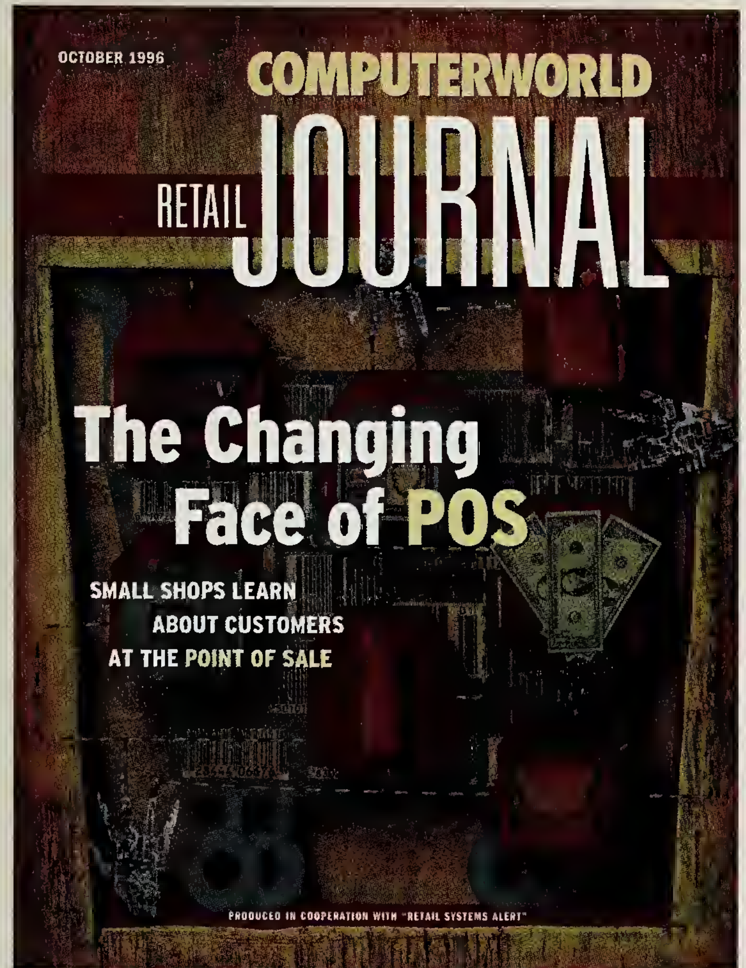

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